of salicylic acid. These results have a bearing on the use of these substances as food preservations, both sodium benzoate and sodium subsalicylate being used to some extent as antiseptics. The latter, Wood finds to possess distinct antiseptic properties, 1 per cent. solution being sufficient to prevent the development of microörganisms.

**Cotarnine Phthalate.**—C. A. von Ramdohr (*New York Med. Jour.*, 1907, lxxxv, 438) reports upon this drug as follows: Cotarnine is a derivative of narcotine, which is a constituent of opium, and its phthalic acid salt possesses special hemostatic properties; it is a yellowish, crystalline power, easily soluble in water, and its usual dosage is $\frac{3}{4}$ of a grain in tablet form three to five times daily. Even larger doses may be prescribed, and even then there are no unpleasant sequels. The particular field of its usefulness is in the control of uterine hemorrhage, especially that occurring in connection with fibromas. It may also be employed in dysmenorrhea and in the irregular menstruation of the menopause. It is less useful postpartum. Cotarnine is believed to act upon the vasomotor nerves of the uterus rather than upon the uterine muscle. von Ramdohr reports 6 instances of persistent uterine hemorrhage in which the ordinary remedies failed; 5 of these, including 2 of obstinate bleeding after abortion, responded quickly to cotarnine phthalate. He advises the use of this agent in selected patients who refuse operation, when a uterine hemostatic is demanded and there is no necessity for a hurried uterine contraction.

## PEDIATRICS.

UNDER THE CHARGE OF

LOUIS STARR, M.D., AND THOMPSON S. WESTCOTT, M.D.,
OF PHILADELPHIA.

**Primary Intestinal Tuberculosis in a Nursing Baby.**—Irving M. Snow (*Arch. of Pediat.*, April 1907, 297) reports an interesting case under this title. About March 1, 1905, a girl baby was born to healthy young parents, who had an older boy, aged one year, in good health. Early in April this boy died after an illness of six days, characterized by diarrhœa, high temperature, mucous and bloody stools, and terminal convulsions. As later events showed, this illness was probably tuberculous in character. The younger baby was much nursed by the mother and thrived for two months. At this time slight irregular fever began and continued until death, June 27. About June 1, a few papules appeared on the trunk and limbs, followed later by more papules and pustules on the thigh, forehead, and chest. A week later cough and occasional respiratory distress were noted, fever continued, and the spleen began to enlarge; bronchopneumonia developed and death occured after vomiting of blood and the passage of numerous bloody stools.

The autopsy revealed miliary tuberculosis of the lungs, spleen, and skin, caseous lymph nodes (bronchial and mesenteric), and a tuberculous ulcer of the ileum. Inoculation experiments with the mother's milk gave negative results. It was quite evident that both children were infected about the end of March, the older child dying quickly, the younger lingering for two months. Further investigation showed that the trained nurse, who had attended the mother in confinement, was at the time in poor health and coughed frequently. After a month's stay she went home and about July 1 tubercle bacilli were found in her sputum and lesions were discovered in her lungs. There can scarcely be a doubt that the nurse infected both babies by prolonged personal contact, either by kissing, sneezing, coughing, or breathing in their faces. It was also ascertained that a baby cared for by this same nurse nine months previously had recently died of bronchopneumonia.

In this case Snow believes that the avenue of infection and the primary lesion were in the digestive tract. The ileum, for about eight inches from the ileocecal valve, was firmly fixed in a mass of enlarged lymph nodes, and at this point was a circular area of ulceration of the mucosa, three quarters of an inch in width compressing the whole caliber of the intestine.

---

**The Determination of the Caloric Value of Modified Milk.**—GEORGE W. MOOREHOUSE (*Arch. of Pediat.*, February 1907, 86) gives a very simple method for estimating the caloric value of an infant's food, when the total quantity and the percentage formula are known. The method is as follows: Reduce the twenty-four hour amount to cubic centimeters, one ounce being equal to 29.5 c.c. Next determine the number of grams of fat, sugar, and proteids in the mixture by multiplying the number of cubic centimeters in the daily amount by the percentages of fat, sugar, and proteids. The calories from each constituent may be determined by remembering that a gram of fat furnishes 9.3 calories and a gram of sugar or proteid furnishes 4.1 calories. The calculation may be simplified by expressing the arithemetical processes by equations, thus: calories from fat $= Q \times 29.5 \times \frac{F}{100} \times 9.3 = Q \times F\ 2.74$; and calories from sugar and proteids $= Q \times 29.5 \times \frac{(S \times P)}{100} \times 4.1 = Q \times (S \times P) \times 1.21$. The sum of these two values gives the total calories furnished by the mixture, and this figure divided by the weight of the child in pounds gives the calories per pound per day.

In a companion paper by J. J. THOMAS (loc. cit., 82) a basis of comparison of the results obtained by Moorehouse's calculations is furnished. Quoting Finkelstein this author states that the average breast-fed infant draws daily during the first weeks of life one-fifth of its body weight; from the middle of the first to the end of the second quarter of the first year, one-sixth to one-seventh; and during the latter half of the first year, one-eighth of its body weight. Expressed in round numbers per kilo of body weight, during the first three months it draws 150 c.c.; during the second somewhat less; and during the third 120 to 130 c.c. Expressed in terms of energy quotient (Heubner), or calories per kilo, the requirement during the first three months is 100 calories per kilo (45.4 calories per pound); during the second three months, between 100 and 90 (40.9 calories per pound); during the latter half of the first year the requirement gradually sinks to 80 or a trifle below (36.4 calories per pound).